STATE OF CALIFORNIA CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

PERMIT FOR DIVERSION AND USE OF WATER

PERMIT 21066

Application 27177 of

Geysers Power Company, LLC c/o Calpine Corporation
Mr. Kevin S. Talkington
50 West San Fernando Street
San Jose, CA 95113

filed on **January 11, 1982**, has been approved by the State Water Resources Control Board (SWRCB) SUBJECT TO PRIOR RIGHTS and to the limitations and conditions of this permit.

Permittee is hereby authorized to divert and use water as follows:

Big Sulphur Creek	Tributary to Russian River	
within the County of Sonoma		

2. Location of point of diversion

By California Coordinate System in Zone 2	40-acre subdivision of public land survey or projection thereof	Section (Projected)*	Township	Range	Base and Meridian
North 400 ft & East 850 ft from SW corner of Sect. 28	SW1/4 of SW1/4	28	11N	8W	MD
Places of Injection are located:	SW¼ of SW¼	28	11N	8W	MD

3. Purpose of use	4. Place of use	Section (Projected)*	Township	Range	Base and Meridian	Acres
Power (Geothermal) and Industrial	NW¼ of NE¼	33	11N	8W	MD	
	SW1/4 of SW1/4	28	11N	8W	MD	

The place of use is shown on map on file with the SWRCB.

5. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 22 cubic feet per second to be diverted from October 1 of each year to May 1 of the succeeding year. The maximum amount diverted under this permit shall not exceed 5000 acre-feet per year.

(0000005A)

6. Complete application of the water to the authorized use shall be made by December 31, 2010.

(0000009)

7. This permit shall not be construed as conferring upon the permittee right of access to the point of diversion.

(0000022)

8. Permittee shall comply with the following provisions which are derived from the agreement between permittee and Hilary Farms, Inc. and Prentis Hale executed on June 18, 1985 and filed with the State Water Resources Control Board:

This permit is specifically subject to the prior right of Hilary Farms, Inc. and Prentis Hale under appropriation issued pursuant to Application 8955.

Inclusion in this permit of certain provisions of the referenced agreement shall not be construed as disapproval of other provisions of the agreement or as affecting the enforceability, as between the parties, of such other provisions insofar as they are not inconsistent with the terms of this permit.

(0000024)

9. No water shall be diverted under this permit unless permittee has installed a device, satisfactory to the SWRCB, at the gauging station located immediately downstream of the BSC-I Extraction Facility (point of diversion for license to be issued pursuant to Application 28320) which is capable of measuring the bypass flows required by the conditions of this permit. Said measuring device shall be properly maintained.

(0060400)

- 10. For the protection of fish and wildlife, permittee shall during the period:
 - (a) from October 1 through November 30 bypass a minimum of 12.5 cubic feet per second,
 - (b) from December 1 through March 31 bypass a minimum of 15 cubic feet per second, and
 - (c) from April 1 through May 1 bypass a minimum of 12.5 cubic feet per second.

The total streamflow shall be bypassed whenever it is less than the designated amount. Streamflows shall be measured at the device required by the conditions of this permit. Permittee shall record the streamflow, as measured by the device, on everyday that water is diverted under this permit. A record of the streamflow measurements shall be submitted annually with the Progress Report of permittee.

(0140060)

11. Should any buried archeological materials be uncovered during project activities, such activities shall cease within 100 feet of the find. Prehistoric archeological indicators include: obsidian and chert flakes and chipped stone tools; bedrock outcrops and boulders with mortar cups; and locally darkened midden soils containing some to the previously listed items plus fragments of bone and fire affected stones. Historic period site indicators generally include: fragments of glass, ceramic and metal objects; milled and split lumber; old trails; and structure and feature remains such as building foundations and dumps. The Chief of the Division of Water Rights shall be notified of the discovery and a professional archeologist shall be retained by the applicant to evaluate the find and recommend appropriate mitigation. Project related activities in the area of the find shall resume only after the completion of the recommended mitigation, as approved by the Chief of the Division of Water Rights.

(0380500)

12. In accordance with Section 6100 of the Fish and Game Code, no work shall be started on the diversion works and no water shall be diverted under this permit until permittee has implemented measures to protect fishlife. Such measures shall include fish screens, or other suitable methods for the prevention of entrapment or impingement of fish, which meet applicable National Marine Fisheries Service and California Department of Fish and Game criteria. Permittee shall provide certification that it's proposed screening methods meet these criteria. Certification shall be made by Service or Department personnel, a License Civil Engineer, or other suitable professional. Construction, operation, and maintenance of any required facility are the responsibility of the permittee. If the device(s) required by this term is (are) rendered inoperative for any reason, all diversions shall cease until such time as the device(s) is (are) restored to service.

(0360500)

13. In the event that any changes in the locations or expansions of the point of diversions, injection wells, or power generating facilities become necessary at a future date, then the proposed relocations shall be evaluated by a professional archeologist to insure that no cultural resources will be impacted by the proposed changes. A report shall be submitted to the Chief of the Division of Water Rights for review and approval. Future developments at these locations may be permitted if: the sites are determined not to be eligible for inclusion in the California Register of Historic Resources; or appropriate mitigation measures, to be recommended by a qualified archeologist and approved by the Chief of the Division of Water Rights, are completed.

(0380500)

14. Permittee shall allow representatives of the State Water Resources Control Board and the California Department of Fish and Game reasonable access to the project works to determine compliance with the terms of this permit.

(0060062A)

15. In accordance with Section 1601 and/or Section 1603 of the Fish and Game Code, no work shall be started on the diversion works and no water shall be diverted under this permit until permittee has entered into a stream or lake alteration agreement with the California Department of Fish and Game. Permittee shall submit a copy of the agreement to the Division of Water Rights within 30 days from the date of the agreement's issuance. Construction, operation and maintenance necessary to meet the terms of the agreement are the responsibility of the permittee. If the Department determines that an agreement is not required for this permit, then permittee shall submit a letter from the Department to the Division documenting such a determination.

(0000063)

ALL PERMITS ISSUED BY THE STATE WATER RESOURCES CONTROL BOARD ARE SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

- (A) Permittee shall maintain records of the amount of water diverted and used to enable SWRCB to determine the amount of water that has been applied to beneficial use pursuant to Water Code section 1605.
- (B) The amount authorized for appropriation may be reduced in the license if investigation warrants.
- (C) Progress reports shall be submitted promptly by permittee when requested by the SWRCB until a license is issued.
- (D) Permittee shall allow representatives of the SWRCB and other parties, as may be authorized from time to time by said SWRCB, reasonable access to project works to determine compliance with the terms of this permit.
- (E) Pursuant to California Water Code sections 100 and 275, and the common law public trust doctrine, all rights and privileges under this permit and under any license issued pursuant thereto, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of SWRCB in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.

The continuing authority of the SWRCB may be exercised by imposing specific requirements over and above those contained in this permit with a view to eliminating waste of water and to meeting the reasonable water requirements of permittee without unreasonable draft on the source. Permittee may be required to implement a water conservation plan, features of which may include but not necessarily be limited to (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this permit and to determine accurately water use as against reasonable water requirements for the authorized project. No action will be taken pursuant to this paragraph unless the SWRCB determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the SWRCB also may be exercised by imposing further limitations on the diversion and use of water by the permittee in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the SWRCB determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution Article X, Section 2; is consistent with the public interest; and is necessary to preserve or restore the uses protected by the public trust.

- (F) The quantity of water diverted under this permit and under any license issued pursuant thereto is subject to modification by the SWRCB if, after notice to the permittee and an opportunity for hearing, the SWRCB finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to Division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the SWRCB finds that (1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2) the water quality objectives cannot be achieved solely through the control of waste discharges.
- (G) This permit does not authorize any act which results in the taking of a threatened or endangered species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). If a "take" will result from any act authorized under this water right, the permittee shall obtain authorization for an incidental take prior to construction or operation of the project. Permittee shall be responsible for meeting all requirements of the applicable Endangered Species Act for the project authorized under this permit.

This permit is issued and permittee takes it subject to the following provisions of the Water Code:

Section 1390. A permit shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division (of the Water Code), but no longer.

Section 1391. Every permit shall include the enumeration of conditions therein which in substance shall include all of the provisions of this article and the statement that any appropriator of water to whom a permit is issued takes it subject to the conditions therein expressed.

Section 1392. Every permittee, if he accepts a permit, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any permit granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any permittee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any permittee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

Dated: 0CT - 6 2000

STATE WATER RESOURCES CONTROL BOARD

Marry M. Schueller, Chief Division of Water Rights